

RAYS™

Industrial Batteries
Enlightening with Reliability



HDS GLOBAL PTE LTD
SINGAPORE

COMPANY PROFILE



We HDS Global Pte Ltd, Singapore with our Brand RAYS is committed to provide adapted and technology advanced energy supply solutions with products and services in a smarter, simpler, and more cost-effective manner. Strategically we are targeting to be a total power supply solution provider.



"Quality, Stability and Reliability" is our product concept. We offer a complete one stop battery solutions with a wide range of 2v single cell, 4V, 6V, 8V, 12V mono block with the capacity from 1.8Ah to 3000Ah for the wide range of applications such as Telecommunications, UPS, Renewable Energy, Alarms, Security Power Plants, Electric Vehicles and many other applications where Back-up Power is required to safeguard the power security and input current. We are one of the few suppliers to give the complete range from VRLA, Hybrid GEL, GEL, Deep Cycle GEL, and Lithium Ion batteries.



Our manufacturing unit is having a state of art technology and equipped with the latest machineries and instruments. The entire product range being manufactured is through strict Q/C norms, right from the raw material to the final product, ensuring the high-quality product delivered. Our Batteries are manufactured to meet applicable international engineering standards like IEC 60123 & IEC 60896. Our Facilities also comply with international quality standards like ISO 9001, ISO14001, ISO 45001, CE and UL.



RAYS is managed by a team of highly proficient industry professionals. We as a team continue to see a host of opportunities where we can use our expertise and execution capabilities. We believe in quality and reliability coupled with a high level of professionalism and good service. Our performance characteristics are uniquely defined by our work culture and our culture begins with values that drive everything we do: Quality, Reliability, Trust, Integrity, Innovation, and Involvement. We assure the best of sales/ service support with minimum downtime with the global presence.



Our Customer relationships are created, maintained & continuously enhanced by providing the best products & services for every unique geography, market & application around the world. By applying our experience, know-how and innovation to meet the needs of our markets & customers, we consistently deliver ideal energy storage solutions for a wide range of applications. We thrived due to our commitment to provide high quality with cost effective products.

HYBRID GEL SMF VRLA BATTERIES

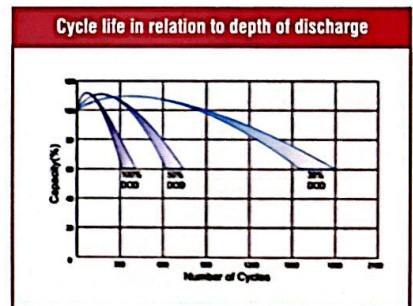
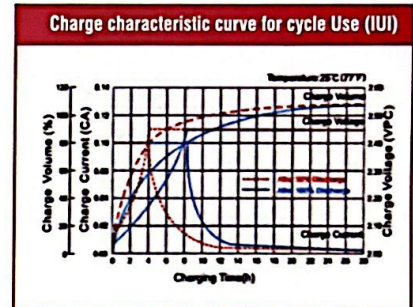
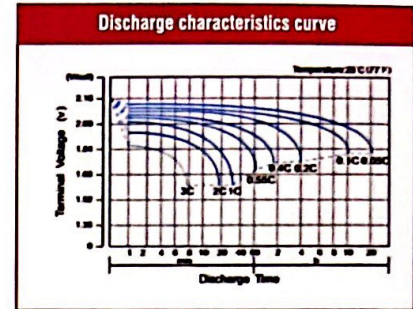
SPF-G Series batteries are designed to meet the requirements of frequent cyclic and high temperature applications such as broadband, PVs etc through up-to-date Hybrid gel technologies. Hybrid Gel batteries uses German origin high purity fumed silica to form sulfuric acid thixotropic Gel and its partially fills to the batteries with vacuum to ensure the fully penetration of electrolyte through separators and plates pastes. By combining the newly developed nano gel electrolyte with up-to-date AGM structure, it's the innovation range of RAYS SPF-G Series batteries.

FEATURES AND BENEFITS

- 20 years floating design life at 25°C.
- Nano gel electrolyte eliminate the acid stratification and prolong cycle life.
- Low self-discharge rate and long shelf life,
- Excellent deep discharge recovery capability.
- Fire retardant containers.
- Flexibility design for multiple install positions.
- High quality and high reliability.
- Thin plate technology.

GENERAL APPLICATION

- UPS/EPS
- Emergency backup power supply.
- Emergency lighting.
- Communication.
- Power supply and generator DC control power supply



TECHNICAL SPECIFICATIONS

MODEL	NOMINAL VOLTAGE (V)	CAPACITY (AH) 10HR	LENGTH MM	WIDTH MM	HEIGHT MM	TOTAL HEIGHT MM	WEIGHT (KG)	TERMINAL
SPF 42-12G	12	42	198	166	169	169	12.4	F4/F11
SPF 65-12G	12	65	350	167	182	182	19.5	F5/F11
SPF 100-12G	12	100	328	172	215	220	29.5	F12/F5
SPF 120-12G	12	120	407	177	225	225	33.5	F5/F12
SPF 150-12G	12	150	483	170	241	241	41.0	F4/F12
SPF 200-12G	12	200	522	240	219	224	58.0	F16/F10
SPF 230-12G	12	230	522	240	219	224	63.0	F16/F10
SPF 240-12G	12	240	522	240	219	224	64.0	F16/F10
SPF 260-12G	12	260	521	268	220	225	72.0	F14

HIGH RATE DISCHARGE VRLA BATTERIES

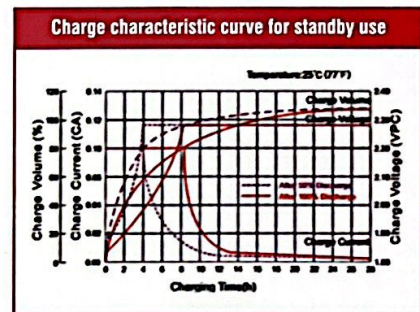
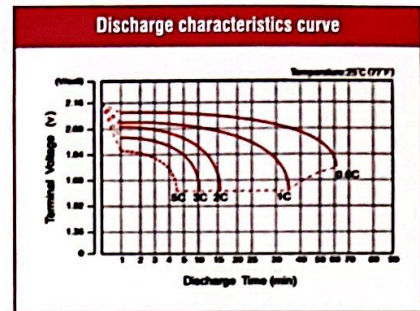
HR (High Rate) series is specially designed for heavy load discharge applications with 8 to 15 years design life in float service. By using strong grids and specially designed active material the HR series offers stable performance during high current discharge requirements. The HR series offers 30% more power output than the standard range. Suitable for UPS/EPS where high current loads are required.

TECHNICAL FEATURES

- 8 to 15 years design life in float service.
- Superior energy density and very high power output.
- Low self-discharge performance.
- Wide operation temperature range

APPLICATION

- UPS/EPS
- Emergency backup power supply.
- Emergency lighting.
- Communication.
- Power supply and generator DC control power supply



TECHNICAL SPECIFICATIONS

MODEL	NOMINAL VOLTAGE (V)	CAPACITY 15MIN/1.67VPC (W)	DIMENSION				WEIGHT (KG)	TERMINAL
			LENGTH MM	WIDTH MM	HEIGHT MM	TOTAL HEIGHT MM		
HR12-150W	12	150	198	166	169	169	12.4	F11(M6)
HR12-200W	12	200	229	138	211	216	16.5	F11(M6)
HR12-240W	12	240	350	167	182	182	19.5	F11(M6)
HR12-280W	12	280	260	169	211	216	24.8	F11(M6)
HR12-340W	12	340	306	168	210	215	29.0	F12(M8)
HR12-380W	12	380	328	172	215	220	30.5	F12(M8)
HR12-450W	12	450	407	177	225	225	36.5	F12(M8)
HR12-520W	12	520	340	173	280	287	44.0	F12(M8)
HR12-580W	12	580	340	173	280	287	47.0	F12(M8)
HR12-620W	12	620	532	207	214	219	56.0	F12(M8)
HR12-650W	12	650	522	240	219	224	61.0	F10(M8)
HR12-690W	12	690	522	240	219	224	63.5	F10(M8)
HR12-780W	12	780	522	240	219	224	72.0	F10(M8)
HR12-850W	12	850	521	268	220	225	80.5	F10(M8)

STANDARD SMF VRLA BATTERIES

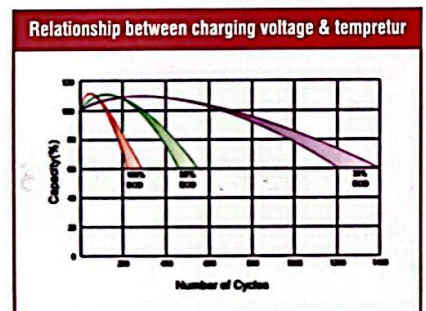
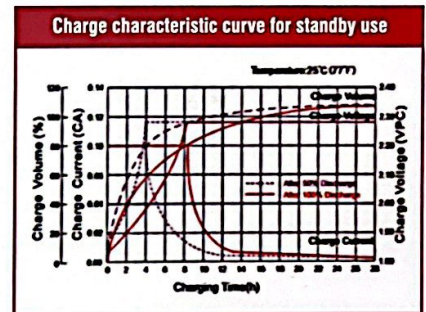
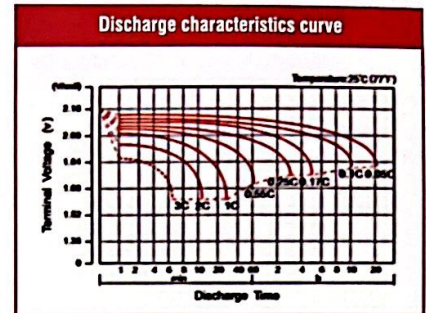
SP series is a standard SMF VRLA Battery which is most widely used in all kinds of applications, for voltage range of 4V, 6V and 12V and capacity from 0.8 to 260Ah. SP series is designed with the latest AMG VRLA Battery technology, using purest of materials. The batteries are of long floating and cyclic life span. They have the highest specific energy and low self-discharge rate. They are leak proof, corrosion resistant and work efficiently in both low and high temperature

SSP/SP SERIES TECHNICAL FEATURES

- SP series is a general-purpose battery with 12 years design life in float service at 25°C.
- High specific energy.
- Excellent cyclic performance and recovery performance after discharging.
- High purity material ensuring extremely low self-discharging.
- Thin plate technology.

APPLICATION

- UPS/EPS.
- Emergency backup power supply.
- Emergency lighting.
- Communication.
- Power supply and generator DC control power supply.



TECHNICAL SPECIFICATIONS SP SERIES

MODEL	NOMINAL VOLTAGE (V)	CAPACITY C20(Ah 1.75V/Cell)	DIMENSION				WEIGHT (KG)	CHARGING COLTAGE	
			LENGTH MM	WIDTH MM	HEIGHT MM	TOTAL HEIGHT MM		STANDBY USE (V)	CYCLIC USE (V)
SP 12-7	12	7	151	65	94	100	2.00	13.50 to 13.80 V at 20°C 68°C.	14.40 to 15V at 20°C 68°C.
SP 12-12	12	12	151	98	95	101			
SP 12-18	12	18	181	77	167	167			
SP 12-26	12	26	166	178	125	125			
SP 12-42	12	42	198	166	169	169			
SP 12-65	12	65	350	167	182	182			
SP 12-75	12	75	260	169	211	216			
SP 12-100	12	100	328	172	215	220			
SP 12-120	12	120	407	177	225	225			
SP 12-150	12	150	483	170	241	241			
SP 12-200	12	200	522	240	219	224			
SP 12-230	12	230	521	269	204	209			
SP 12-260	12	260	521	268	220	225			

STANDARD SMF VRLA 2V BATTERIES

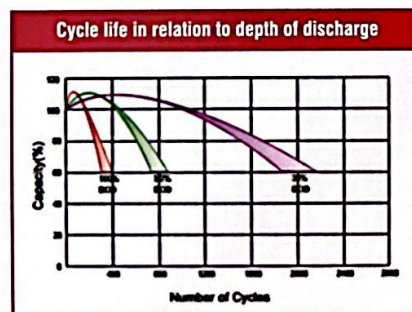
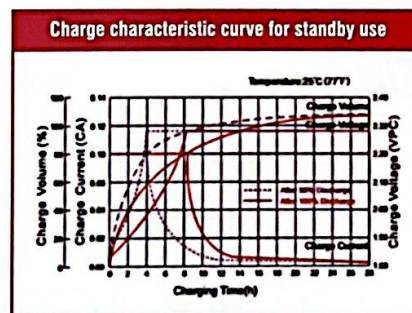
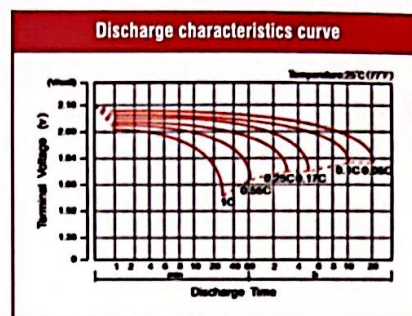
SP 2V series is a general-purpose battery with 20 years design life in float service. With heavy duty grids, thicker plates, special additives, and updated AGM valve regulated technology, the SP 2V series battery provides consistent performance and long service life. The new grid design effectively reduces the internal resistance, which provides higher specific energy density and excellent high rate discharge characteristics. It is suitable for communications back-up power and EPS/UPS applications.

SP 2V TECHNICAL FEATURES

- Long design life.
- Low self-discharge rate.
- High specific energy density.
- Excellent high rate discharge performance.

APPLICATION

- Telecom systems.
- UPS/EPS
- Control systems.
- Electric power systems.



TECHNICAL SPECIFICATIONS

MODEL	NOMINAL VOLTAGE (V)	CAPACITY C10 (AH1.80V / CELL)	LENGTH MM	WIDTH MM	HEIGHT MM	TOTAL HEIGHT MM	WEIGHT (KG)	TERMINAL
SP 2-200	2	200	170	106	330	342	11.50	F10/M8
SP 2-300	2	300	170	150	330	342	16.50	F10/M8
SP 2-400	2	400	170	150	330	342	19.00	F10/M8
SP 2-500	2	500	196	171	330	342	25.50	F10/M8
SP 2-600	2	600	241	171	330	342	30.00	F10/M8
SP 2-800	2	800	285	171	330	342	39.00	F10/M8
SP 2-1000	2	1000	383	171	330	342	51.00	F10/M8
SP 2-1500	2	1500	355	337	330	342	84.50	F10/M8
SP 2-2000	2	2000	476	337	330	342	116.50	F10/M8
SP 2-2500	2	2500	476	337	330	342	121.00	F10/M8
SP 2-3000	2	3000	696	340	330	342	170.00	F10/M8

LITHIUM ION PHOSPHATE BATTERY

Equipped with communication function, protection function for overcharge, over discharge and over temperature, and battery equalization technology. The system uses environmental-friendly lithium ion phosphate batteries and is equipped with high performance BMS to manage the battery cell efficiency.

APPLICATION

- Photovoltaic power generation.
- Communication base station.
- UPS

TECHNICAL SPECIFICATIONS

48V50AH Lithium Battery	
Model	R-LFP48V50Ah
Battery Type	Power Lithium (Lithium Ion Phosphate)
Customizable	Yes
Nominal Voltage	48 (V)
Nominal Capacity	50Ah (0.2C discharge)
Dimension	482*400*89 (mm)
Charge Time Recommended	5h
Max. Voltage	54.75V±1.0V
Min. Voltage	37.5V±1.0V
Max. Discharge Current	50A
Max. Charge Current	50A
Security Certification	TüV / CE / UN38.3 / TLC
Communication Port	RS232, RS485
Cycle Life	>4500 (0.2C charge/0.2C discharge)
Weight (Kg)	27 Kg



48V100AH Lithium Battery	
Model	R-LFP48V100Ah
Battery Type	Power Lithium (Lithium Ion Phosphate)
Customizable	Yes
Nominal Voltage	48 (V)
Nominal Capacity	100Ah (0.2C discharge)
Dimension	482*400*177 (mm)
Charge Time Recommended	5h
Max. Voltage	54.75V±1.0V
Min. Voltage	37.5V±1.0V
Max. Discharge Current	100A
Max. Charge Current	100A
Security Certification	TüV / CE / UN38.3 / TLC
Communication Port	RS232, RS485
Cycle Life	>4500 (0.2C charge/0.2C discharge)
Weight (Kg)	41 Kg



PRODUCTS WE OFFER

Telecom



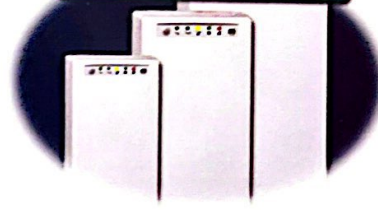
Solar & Wind Energy



Power system



UPS



Electric Vehicle



RAYSTM
Industrial Batteries